IN THE CLAIMS:

1. (Previously Presented) A method of sending data between a client and a server using at least one of plural data buffers of different sizes in said client and at least one of plural data buffers of different sizes in said server, comprising steps of:

sending, from said client to said server, an address of a client data buffer located within said client, said address of said client data buffer for a data transfer responsive to a size of a data block to be transferred; and

transferring said data block between said client and said server using said client data buffer and a server data buffer from among the plural data buffers in said client and the plural data buffers in said server, said client data buffer and said server data buffer matched to a size of data blocks to be transferred into or out of those data buffers.

2. (Previously Presented) A method as in claim 1, wherein

a request or a response for transferring said data includes at least some control information; and

said steps of transferring said data are responsive to said control information.

3. (Previously Presented) A method as in claim 1, wherein

a request or a response for transferring said data includes at least one memory address;

said steps of sending said data blocks are responsive to said memory address, wherein said data is read from or written to a memory in response to said memory address.

4. (Previously Presented) A system including

a client and server;

a NUMA communication link coupled to said client and server; and

plural data buffers of different sizes in said client and plural data buffers of different sizes in said server for data transfers between said client and said server using said NUMA communication link;

wherein when data is transferred between said client and said server using said data buffers, an address of a client data buffer located within said client is sent from said client to said server, with said address of said client data buffer for a data transfer responsive to a size of a data block to be transferred, and said client data buffer and a server data buffer from among the plural data buffers are used to transfer said data block, with said client data buffer and said server data buffer matched to a size of said data block to be transferred into or out of those data buffers.

5. (Previously Presented) A system as in claim 4, also including a byte serial communication link, wherein transferring said data also uses said byte serial communication link.

6. (Previously Presented) A system as in claim 4, wherein

either said client or server performs processing of information in transferring said data;

said processing is performed in an order convenient to both said client and server; and

said order is decoupled from an order of transferring said data.

7. (Previously Presented) A system as in claim 4, wherein transferring said data is responsive to control information in a request or a response for said data transfer.

8. (Previously Presented) A system as in claim 4, wherein transferring said data is responsive to a request or a response for said data transfer.

9. (Cancelled)

10. (Previously Presented) A system as in claim 4, wherein said one or more data buffers also is selected responsive to control information in a request or a response for transferring said data.

11. (Cancelled)

12. (Previously Presented) A system including

a server, said server having a memory including a client communication region and a data transfer region, said data transfer region having plural data buffers of different sizes for data transfers to and from a client, at least some of said data buffers matched to different sizes of data blocks to be transferred into or out of those data buffers and matched to different sizes of data buffers in said client that are also matched to said different sizes of said data blocks to be transferred; and

a remote DMA communication link coupled to said data transfer region;

wherein said client communication region includes information regarding a data transfer into or out of said data transfer region; and

wherein an address of one or more of said server data buffers for said data transfer is selected for a data transfer responsive to a size of data blocks for said data transfer.

13. (Original) A system as in claim 12, including a byte serial communication link coupled to said client communication region.

14. (Original) A system as in claim 12, including a processing element in said server coupled to said data transfer region, said processing element responsive to a request from a client or a response to a client.

15. (Original) A system as in claim 12, including a processing element in said server coupled to said data transfer region, said processing element responsive to control information in said client communication region.

16. (Original) A system as in claim 12, including a processing element in said server coupled to said data transfer region, said processing element using information in said data transfer region independently of said remote DMA communication link.

17. (Original) A system as in claim 12, including a request from a client or a response to said client having information regarding a location within data transfer region.

18. (Original) A system as in claim 12, wherein said client communication region stores a request from a client or a response to said client.

19. (Original) A system as in claim 12, wherein said data transfer region stores a data transfer to or from a client.

20. (Original) A system as in claim 12, wherein said remote DMA communication link includes a NUMA communication link.

21. (Previously Presented) A method including

communicating file system requests and responses between a client and a file server;

sending data between said client and said file server using a memory access operation involving at least one of plural data buffers of different sizes both in said client and in said file server, at least some of said data buffers both in said client and in said file server matched to sizes of data blocks to be transferred into or out of said data buffers, wherein selection of an address of one or more of said data buffers for a data transfer is responsive to information in said requests or said responses and is responsive to a size of data blocks for said memory access operation.

22. (Original) A method as in claim 21, wherein said memory access operation includes a DMA operation.

23. (Original) A method as in claim 21, wherein said memory access operation includes a remote DMA operation.

24. (Original) A method as in claim 21, wherein said client includes a database server.

25. (Previously Presented) A method including

communicating database requests and responses between a client and a database server;

sending data between said client and said database server using a memory access operation involving at least one of plural data buffers of different sizes both in said client and in said

database server, at least some of said data buffers both in said client and in said database server matched to sizes of data blocks to be transferred into or out of said data buffers, wherein selection of an address for one or more of said data buffers for a data transfer is responsive to information in said requests or said responses and is responsive to a size of data blocks for said memory access operation.

26. (Previously Presented) A method including

communicating requests and responses between a client and a server;

sending data between said client and said server using a memory access operation involving at least one of plural data buffers of different sizes both in said client and in said server, at least some of said data buffers both in said client and in said server matched to sizes of data blocks to be transferred into or out of said data buffers, wherein selection of an address for one or more of said data buffers for a data transfer is responsive to information in said requests or said responses and is responsive to a size of data blocks for said memory access operation.

27. (Cancelled)

28. (New) A method as in claim 1, wherein said data buffers in said client include different sizes and alignments than said data buffers in said server.

29. (New) A system as in claim 4, wherein said data buffers in said client include different sizes and alignments than said data buffers in said server.

30. (New) A system as in claim 12, wherein said data buffers in said client include different sizes and alignments than said data buffers in said server.

31. (New) A method as in claim 21, wherein said data buffers in said client include different sizes and alignments than said data buffers in said server.

32. (New) A method as in claim 25, wherein said data buffers in said client include different sizes and alignments than said data buffers in said database server.

33. (New) A method as in claim 26, wherein said data buffers in said client include different sizes and alignments than said data buffers in said server.